

Part. Handbook
Africa - North
Sudan

1160

SUDAN



R. Roussel

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HANDBOOK
OF THE
SUDAN GOVERNMENT
RAILWAYS
AND
STEAMERS.



OFFICE OF THE EUROPEAN TRAFFIC MANAGER,
5, NORTHUMBERLAND AVENUE,
CHARING CROSS, LONDON.

Telegrams "SUDANOLOGY, WESTRAND, LONDON."

Cablegrams "SUDANOLOGY, LONDON."

Telephone

Regent 1071 (2 lines).



Sudan Government Railways and Steamers.



THE "SUNSHINE" EXPRESS.

IN the winter months, particularly from November to the end of February, the climate of the Northern Sudan is delightful, the sunshine constant and tempered by invigorating breezes, rendered still more bracing at Khartoum by the altitude of about 1,200 feet at which the town stands above sea-level. The air, warm and dry, acts as a rapidly effective tonic on those in search of health and pleasure, and the country is free from mosquitoes and other insect pests so prevalent in most winter resorts. The death-rate in Khartoum is below that of any other city, and the almost perfect health of the town is due to the lavish sunshine it enjoys and the excellent working of the Department of Health. Many visitors are glad to escape from the bursts of inclement weather that frequently attack Egypt at this time of the year, and to turn to the Sudan for warmth and sunshine. During the month of November, and especially in December, the country is at its best; the Nile is high, and the magnificent river shows to the greatest advantage.

The Sudan is a land of wonder. By the marvellous rapidity of its social and economic development, by the vast extent of its territory, by the

historic associations of Khartoum, by Omdurman—instinct with all that is most characteristic of native life—the Sudan arrests the imagination and compels the interest of the traveller.

The completion in December, 1899, of the railway from Halfa to Khartoum; the subsequent improvement of the rolling stock—which to-day includes



A DATE PALM.

pecially constructed restaurant and sleeping cars—the placing on the Nile between Shellal and Halfa of the comfortable express mail steamers of the Sudan Government, have rendered the journey rapid and easy. The visitor from London can reach Khartoum in nine days.

These vessels, named “Britain” and “Sudan,” are 160 feet in length, with three decks, carrying cabins, saloon, smoking room, lavatories and bath rooms. There is, forward, a large open deck space which can be enclosed, when required, by glass paneling and sheltered from the sun by double roofing and awnings.

With four exceptions the cabins are single berthed. The vessels are equipped with electric light and refrigerating plant, and the catering, under the management of the Railways, is of the highest class.

Through fast services are despatched during the winter months from Cairo to Khartoum, the journey occupying less than four days, including the run of forty hours up the Nile from Shellal to Halfa by the Sudan Government steamers.

An alternative and attractive route is provided via Port Sudan in connection with the Dining and Sleeping Car Expresses from that port to Khartoum.

Ordinarily Port Sudan is served fortnightly from Europe by the Union Castle and British India Lines throughout the year.

A regular service between Suez and Port Sudan is maintained by the Khedivial Mail Line, and circular tickets at reduced fares are issued for the round trip from and back to Cairo in either direction.

Visitors breaking the journey at Port Sudan can there enjoy some excellent sea fishing of a most sporting kind. (Page 52.)

During the season a few combined circular tours through the Sudan and Egypt, can be organised to suit tourists desirous of avoiding the trouble of making arrangements for independent travel. Inclusive prices for first-class accommodation throughout can be obtained on application.

The steamers of the Sudan Government navigate the main channel of the White Nile twice every month as far south as Rejaf, the connecting point for parties arriving overland from British East Africa or proceeding thereto. (See page 40).

Travellers in search of big game shooting (under licence), for which the Southern Sudan is



A BARBER'S SHOP.



famous, are specially catered for, and can be provided with private steamers or sailing boats at inclusive rates covering servants, hunters, camp outfit, food, etc. (Page 49).

Short cruises on the White Nile are made at regular intervals by Government steamers enabling the visitor to obtain a varied aspect of the wild country south of Khartoum. (Page 40).

Among the various antiquities of the Sudan which will

attract both the archæologist and the tourist in search of pleasure, may be mentioned the following:—The remains of the ancient town, Behen, near Wadi Halfa; Napata, close to the terminus of the Kareima branch, the ancient capital of Ethiopia; the pyramids and ruins of Meroë which can be visited from Kabushia station; and the noble temples of Nagaa and ruins of Massawarat.



GENERAL INFORMATION.

Passengers may obtain information as to the many places of interest to be visited in the Sudan by consulting the detailed itinerary, shewn on pages 13 to 30.

Full information as to services and tickets can be obtained, and accommodation reserved at the Office of:—

THE EUROPEAN TRAFFIC MANAGER,

SUDAN GOVERNMENT RAILWAYS AND STEAMERS,

5, NORTHUMBERLAND AVENUE,

CHARING CROSS, LONDON,

Telegrams:

“Sudanology, Westrand, London.”

Telephone:

Regent 1071 (2 lines).

or at the Offices of all Tourist Agencies. Passengers may, if they prefer, make their own arrangements through the Sudan Agent at the War Office, Cairo

Baggage.

STEAMERS (Halfa-Shellal Reach).—First Class passengers are allowed sufficient personal baggage for the trip free of charge, registered baggage being charged for at the rate of 16 milliemes per 10 kilos, or approximately 4 pence or 8 cents. per 22 lbs., which includes all portorage charges.

RAILWAYS.—Passengers are permitted to take only light hand baggage into the cars. Ordinary luggage must be registered through and paid for at point of departure. All baggage carried in the baggage van is charged for at rates shewn on inset at the end of the book, which charge includes registration, station handling fees, and insures to the value of a sum not exceeding £E10 for each package. The light hand baggage carried in cars with passengers is carried at their entire risk.

The Sudan Government Railways are exempt from all responsibility for loss of, or damage to jewellery, money, ornaments, precious stones, and bullion.

Baggage to be registered should be brought to the station at least half an hour before the departure of the train. Baggage of first class passengers not required during the journey between Khartoum or Halfa and Shellal (Assuan), Luxor or Cairo, in either direction, can be registered through subject to the rules and regulations in force on the Sudan Government and Egyptian State Railways.



NILE FISHERMAN.

Port Sudan Hotel

AND

Dining Car Services.

The Refreshment Department of the Railways is charged with the management of the Government Hotel at Port Sudan, and with the catering on express trains in the Sudan, and Government Steamers between Shellal and Halfa.

The Port Sudan Hotel stands in an excellent position overlooking the harbour. Though small, it is well furnished and extremely comfortable and visitors may rely on receiving

every attention. The bedrooms accommodate 32 visitors and the dining room twice that number. Equipped throughout with electric light and fans, the hotel is thoroughly suited to the climate, and is convenient not only for passengers proceeding by train to and from Khartoum, but also for those passing through Port Sudan by steamer, for whom lunch or tea taken at the hotel offers a welcome break in the monotony of shipboard.

Port Sudan harbour also bids fair to attract sea anglers for whom the hotel will form ideal headquarters.

The question of catering on trains and steamers has always received the most careful attention so as to ensure a high standard. The headquarters of the department at Khartoum now include an ice-making plant, cold storage chambers, mineral water factory, and steam laundry.

The daily cost for food in the first class between Shellal and Khartoum, comprising the usual table d'hôte meals, with the addition of morning and afternoon tea, is about 14 shillings. Any complaints or suggestions regarding the service and attendance should be addressed to the Traffic Manager of the Railways at Atbara.

* * * *

Catering on Government steamers south of Khartoum is undertaken by the Refreshment Department of the Railways and Steamers.

Letters, Telegrams, &c.

There are Telegraph Offices near the Railway Stations at Halfa, Abu Hamed, Atbara, El Damer, Shendi and Khartoum. Letters can be posted on the trains.

Hotels at Khartoum.

The Grand Hotel is situated on the bank of the Blue Nile. In addition there are the Gordon and Royal Hotels.

Photographs.

The European Traffic Manager will be glad to receive prints of any photographs taken by visitors in the Sudan.

Permit to visit Nile Monuments.

The Government permit for visiting the Nile Monuments in Upper Egypt, including Abu Simbel, is in all cases payable by the passenger (120 piastres, or £1.4s.8d.). This permit can be obtained at the Offices of the Tourist Agencies in Cairo, or by arrangement can be forwarded to await the passenger in Khartoum.

A SHORT HISTORY OF THE SUDAN GOVERNMENT RAILWAYS.

(I) Nile Valley Line.

During the early seventies of the last century Khedive Ismail conceived the project of a railway in the Egyptian Sudan, southwards from Wadi Halfa with branches to Khartoum and El Obeid. However after 33 miles of line had been constructed to Sarras, lack of funds necessitated the abandonment of the scheme.

During the Nile Expedition of 1885-6, the line was extended from Sarras to Akasha, a village about 86 miles from Wadi Halfa, but on the retirement of the expedition from Khartoum this extension was pulled up and Sarras became once more the Southern terminus.



ABU HAMED JUNCTION.

In 1896 when the troops advanced into Dongola Province, construction of the railway recommenced, and on 4th May, 1897, it reached Kerma at the head of the cataracts whence the river is navigable by steamers for 200 miles up stream.

During the winter of 1896-7, preparations were made for the construction of the desert railway from Halfa to Abu Hamed, a small but strategically important town at the head of the great bend of the Nile.

Abu Hamed was captured 8th August, 1897, by Anglo-Egyptian troops who had advanced via the Kerma line and by steamer, the head of the desert railway being then about 80 miles away. After the fall of the town, railhead was pushed forward with greater energy than ever, and reached Abu Hamed on October 31st, 1897. With little delay it was advanced to the Atbara where its terminus remained during the Omdurman campaign of September, 1898.

In November, 1898, preparations were made for the completion of the railway to Khartoum.

The River Atbara, which, during its flood, brings down a volume of water comparable with that of the Nile, was originally crossed by a temporary wooden trestle bridge, but a permanent steel bridge was erected as quickly as possible and opened for traffic on August 26th, 1899. This bridge was reconstructed in 1911.

Railhead was pushed forward simultaneously and reached Khartoum North on the last day of December, 1899.

A bridge, 660 yards long, has since been constructed over the Blue Nile, and trains now cross direct into Khartoum.

The railway has been extended south of Khartoum to Wad Medani and Sennar, and thence westerly to Kosti and El Obeid. The White Nile is crossed near Kosti by a railway and foot-bridge. Further particulars are given on page 36.

(2) Nile—Red Sea Line

Viewed from an economic standpoint, Khartoum lies on the extreme north of the Sudan, and it is by the development



ATBARA JUNCTION.

of the southern provinces that its trade will be increased—such as the gum-producing district of Kordofan, the grain growing areas of the Blue Nile, and ultimately, it may be hoped, the forests of the Upper Nile.

The completion of the railway from Wadi Halfa to Khartoum placed the capital of the Sudan in direct communication by rail and river with Cairo and Alexandria, a distance of 1,480 miles, involving four transshipments. The expense and inconvenience of such a route for commercial purposes made further progress a difficult matter, and steps were taken in 1901 to secure some better and cheaper route by which the commodities necessary for real development—machinery, coal, timber, and the like—could enter the country. The solution of the difficulty lay in the construction of a railway from the Nile to a harbour on the Red Sea.

Care had to be exercised to obtain an easy-graded line across the range of hills running parallel to the coast from the Abyssinian plateau to the Gulf of Suez.



OLD HOUSES, SUAKIN.

The route finally selected was one which involved no gradient steeper than 1 in 100 and no curve sharper than $17\frac{1}{2}$ chains radius.

Suakin, where facilities already existed for landing materials, was made the terminus of the Railway, while the junction of the East Coast and Nile lines is fixed at Atbara about a mile north of the Atbara bridge. Construction was commenced from both ends simultaneously in August, 1904, and on October 15th, 1905,

the railheads met, 305 miles of line having been constructed.

While the Nile Red Sea Railway was in hand, a branch line was laid from Abu Hamed to Kareima to tap the Dongola Province, bringing the total mileage open in January, 1906, to 1,040 miles.

The headquarters of the railway, central workshops, stores, etc., were finally established at Atbara Junction. Port Sudan (some 50 miles north of Suakin) has since been selected as the chief port of the Sudan, by reason of its greater natural advantages compared with Suakin, and a modern harbour, equipped with the latest types of cranes and plant, has been constructed.

Total mileage open to traffic, excluding sidings, is now 1,500 miles. Projected line from Thamiam (Red Sea Line) to Kassala 214 miles.



GOVERNMENT HOUSE, SUAKIN.



PORT SUDAN.

A Circular Tour through the Sudan.

The following facilities are afforded passengers making the round trip from and back to Cairo, via Suez and Port Sudan, or *vice versa*, and to those proceeding from or to European ports by direct steamers calling at Port Sudan.

Port Sudan is regularly served by several lines of mail steamers, and on landing passengers can proceed to the hotel owned and managed by the Government Railways. The new harbour and quays opened on April 1st, 1909, by H.H. the Khedive, are interesting evidence of the progress of the country.

The visitor is impressed by the complete and modern equipment of the Port, and the orderly manner in which the disembarkation is conducted. Everything is of interest; the native porters and the customs officers who smoothly and with celerity clear the baggage at the imposing Custom House buildings, and the picturesque boatmen, plying at fixed fees, who convey passengers across the harbour to the spaciouly planned town. The hotel, recently opened, is under the management of the Government Railways, and offers most comfortable accommodation for visitors.



The tourist trains are composed of the most modern type of cars, designed to ensure the maximum of comfort, easy running, and freedom from dust. They are fitted with smoked glass windows, electric fans and lights, and represent all the latest improvements in coach construction.

Leaving the new Port Sudan Town station the train commences its 300 miles run to Atbara Junction, where it joins the main line. The first 90 miles of this journey are through the hills on an average gradient of 1 in 100, and an altitude of 3,000 feet is reached

at Summit station. Thereafter, the line runs on a gradual down grade to the River Nile.

The scenery is unexpectedly strange and fascinating, presenting a rapidly changing panorama of hills intersected by dried up water courses. Here and there a gazelle is seen darting through the bush, and perhaps a party of the proud and fierce Hadendoa Arabs who inhabit this wild land.



EMBANKMENT STREET, KHARTOUM.

Khartoum North is reached the following day, and after a brief halt the train crosses the seven-span bridge, from which one gets a first sight of the Blue Nile, its graceful native sailing craft, and its further shore lined with handsome buildings embowered in palms and other trees. From Khartoum Central station the passenger is conveyed along broad avenues

of spreading trees to the Grand Hotel on the river bank.

The town derives its name from the Arabic "Elephant's Trunk," on account of the shape of the peninsula between the two Niles.



GORDON'S ROSE TREE, KHARTOUM.



KHARTOUM.

Excursions in and around Khartoum.

Khartoum.

Visitors start from the Grand Hotel entrance, proceeding along the river embankment to the Palace, the residence of H. E. The Sirdar and Governor-General of the Sudan.

His Excellency has kindly given permission for visitors to pass through the principal rooms and the Palace Garden, thence to Gordon's Rose Tree.



GORDON COLLEGE.

The Governor General's Palace, where Gordon lived and died, is the place to which most travellers' footsteps will lead first. It is built on the same foundations as the old one, of which the ground floor remained, and is a building of some pretence. On entering from the river front the traveller should turn to the right in the corridor, and high up on the wall that faces him he will see a brass plate which marks the spot where, on the old Palace stairs, Gordon was killed on January 26th, 1885. Since Gordon's day the gardens behind the palace have been improved and considerably enlarged, but many of the trees and plants which were then there still remain, in particular the rose tree, near to the corner of the south west wing, which is known as "Gordon's Rose Tree."

On leaving the Palace visitors will visit a Shrine from a

Temple at Merowi, recently placed at the back of the War Office, then ride past the Government Workshops and along the river front to Gordon College, and the spacious new barracks of the British Garrison, thence to Gordon's old fortifications and past the barracks of the Sudanese Regiment, to the villages where the native population are quartered. The visitor will notice that each tribe has certain characteristics in its style of habitation. There are in all 20 different tribes, including Shilluk, Dinka, Bornawi, Gebelawi, Fonawi, and other Bagaara tribes, with a total population of 4,000.

From the villages proceed to Khedive's Avenue and Gordon Gardens, where an imposing statue has been erected to Gordon's memory. Close to the Gordon Statue stands the new Cathedral Church of All Saints, Khartoum, which was consecrated on January 26th, 1912, by the Lord Bishop of



THE COVERED MARKET, KHARTOUM.

London. The Cathedral is built in the form of a latin cross, the north transept forming the Gordon Memorial Chapel. The principal entrance is at the west end, the doorway being at the level of the ground outside, with an upper flight of steps inside leading to the inner porch. The stone used in the building, sandstone yellow and pale red, was brought from Jebel Auli, near Khartoum, and the floor of the Sanctuary is laid with Sudanese marble.

Just west of the Palace is a block of Government offices, which, ten years ago, accommodated the whole of the Military and Civil headquarter departments, the Legal staff, and the Offices of the Governor of Khartoum ; but now will only house the Military Department, the Civil Secretary's Department, and the Financial Secretary's Department. West again, with a

pretty garden in front, is the Post Office ; immediately in rear, across the road (Khedivial Avenue) the National Bank. Further west again, on the north side of the Khedivial Avenue, comes another group of Government Offices, and then the imposing block of the new Law Courts, Civil and Mohammedan, which were opened in 1908 by H.R.H. the Duke of Connaught, then the offices of the Irrigation Department, and, marked by the two flags, the Mudirieh, or Head Offices of the Province of Khartoum. The traveller should not fail to visit the Gordon College, the road to which lies along the river front, some day to be continuously embanked. There is a small museum of antiquities and physiological and biological collections at the College, but its most important function is instilling into the youth of the Sudan some tincture of humane letters and of the crafts which may enable them to assist the material prosperity of their country. Not the least of the proficiencies to which they attain is a considerable skill in the football field, as is only fit considering the "internationals" that the College numbers among its staff.

Omdurman.

A Steamer starts from the Grand Hotel landing, and conveys visitors to the South Gate, Omdurman.

The traveller swiftly carried in a comfortable train-de-luxe from Halfa or Port Sudan to an electric-lighted, well appointed house in Khartoum has in the course of his journey seen much that is novel and interesting but he is still on the threshold of the real Sudan.



BOOTMAKERS IN THE "SUK", OMDURMAN.



PREPARING A MEAL, OMDURMAN.

He is surrounded by conditions created in a few years by the magic impulse of a Western Civilization. He is living in a strictly practical and utilitarian environment that bears little or no impression of the native mind or character.

Let him however take the steam ferry from Khartoum at the Junction of the Blue and White Niles and in a few minutes he will find himself in an entirely different atmosphere.

From the upper deck an admirable general idea of the great African Metropolis may be obtained.

Imagine a mud town stretching for 7 miles along the shore of the great river ; a seemingly endless vista of sun-scorched dwellings, immense, tortuous, inconsequent as the mind of the native Empire-builder who conceived it, its vague extremities merging almost imperceptibly into the surrounding desert.

On nearing the landing place attention is concentrated on the fore-shore which slopes easily down to the river from the grain market, and where dhurra and other grains are stacked and cargoes of timber are being unloaded from a fleet of native boats, whose tapering masts and spreading canvas dot the river Northwards as far as the eye can see.

On landing an alien note is struck by the discovery of a steam tramway which, passing the Beit-El-Amana and Mosque Square, reaches the "Central Station" in the heart of the town and from there proceeds south to where a ferry joins Khartoum North with Omdurman, thus completing the circuit of the three towns.



TOMB OF THE MAHDI, OMDURMAN.

Spurning the somewhat commonplace comfort of the tramway (which, however, is very popular among the native population) and walking or riding a donkey parallel to the river, the traveller passes through the grain and gum market, a motley collection of straw shanties on both sides of the road, to the south gate, and, turning sharply to the left a few hundred yards further on, reaches the Beit-El-Amana, or Khalifa's Store. This is surrounded by a high, strongly-made wall, which was built in an incredibly short time by forced labour. A few minutes' ride brings the traveller to the Mosque Square, a huge walled-in enclosure where in the Mahdi's and Khalifa's time a great part of the population were gathered daily for prayer. The Mahdi's Minbar, or pulpit, as well as his tomb have been dismantled, the former entirely, the latter partially.

In the south-east corner of the Square is the Khalifa's Palace, built with bricks taken from Gordon's Palace at Khartoum about 6 months after the siege.

Rising southwards along a broad road to the centre of the town the next and perhaps most interesting of all "sights" is reached viz.: the "Suk" or market.



THE "SUK," OMDURMAN.

The Main Suk is a series of mud booths with common pathways leading one into another, covered in with matting, and with ramifications unknown or imagined by Western architects. Each trade retains a special locality whose merchants are in many cases of the same race.

The whole Suk is admirably clean and the visitor can spend hours inspecting the various wares without being accosted by the indescribable odours so common in other eastern cities.

But the main interest undoubtedly centres in the people among whom every African nationality and tribe is represented. Visitors, and especially those acquainted with the East, cannot fail to be impressed by their extraordinary decorum and personal cleanliness and by the entire absence of that annoying and persistent accompaniment to peregrinations in native towns, the mendicant.

Here is none of the shouting or extravagance of gesture that one is accustomed to in the East. Everything is subdued and restrained. The gesture is limited to the minimum requisite for precise explanation. The bargaining is carried on quietly and without loud protestations. Salutations are exchanged courteously and often in silence.

There are no importunate sellers of their wares. Each man takes pride in showing his handiwork and should the visitors manifest an intelligent interest in it, will enter into long and eager discussion with regard to it, but with all deference and courtesy he will leave the impression that the sale of any of it is a matter of comparative indifference to him—a very adequate testimony to the general prosperity and content of the merchant population.

To conclude, Omdurman is one of the many towns which even to a person unacquainted with the vernacular will repay prolonged and repeated visits.



FORESHORE AT OMDURMAN.

Battlefield of Kerreri.

Start from the Grand Hotel landing by Steamer, proceed to the junction of the Blue and White Niles.

The steamer proceeds down river past Omdurman, where donkeys will be in readiness to take the party to Gebel Surgham, from which point a grand bird's eye view of the battlefield can be had. The 21st Lancers' Monument is passed on the way to Gebel Surgham. It was here that Osman Digna's army lay hiding in the Khor when charged by the 21st.

The party returns by a different road to the Steamer on the way back to Khartoum.



THE PALACE GARDENS, KHARTOUM.

Blue and White Niles Steamer Trip.

The meeting of the two Niles is unique, the rivers running side by side for some considerable distance before merging into the Nile proper, enabling one to view the curious spectacle of the contrasted colours of the waters.

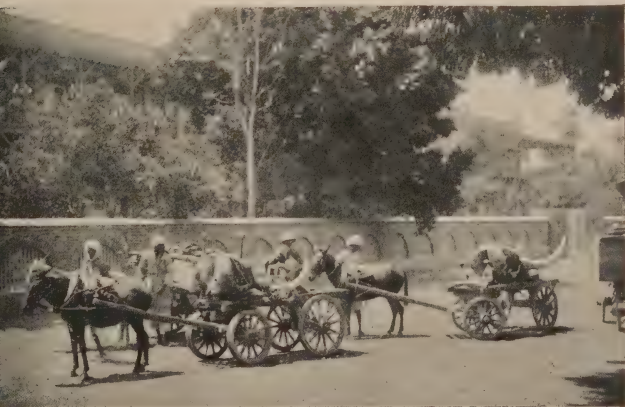
A Steamer leaves the Grand Hotel landing for a trip up the Blue Nile as far as the British Barracks. This gives visitors an excellent opportunity of viewing Khartoum from the river. The town extends for two miles along the river front, and good snapshots can be had of the principal buildings, which include on the south side the Palace of His Excellency the Governor-General of the Sudan, residential villas of the Sudan Officials,



BY THE NILE AT KHARTOUM.

the Grand Hotel, War Office, Post and Telegraph Offices, Government Workshops, Sudan Club, Gordon College, Civil and Military Hospitals, and the British Barracks. On the north side will be seen the rising town of Khartoum North (Halfaya), the handsome new Government Workshops and Dockyards, Government Stores, Artillery Station, Custom House, etc. The steamer returns past the Grand Hotel to the junction of the Blue and White Niles, continuing for a trip up the White Nile to Gordon's Tree, and back to the Grand Hotel.

Passengers for Halfa and Port Sudan leave Khartoum by dining and sleeping car express.



SPORTING TROPHIES ARRIVING AT KHARTOUM.

Return Journey from Khartoum, via Halfa and the Nile.

Meroë.

There is a special station at Kilometre 213, near Kabushia, for the Pyramids and ruins of Meroë, the ancient capital of Queen Candace.



TEMPLE OF AMON AT MEROË.

The pyramids, visible from the railway, like those near Jebel Barkal, are much smaller and more acute in angle than those in Egypt. They were built of stone quarried in the neighbourhood, and have long been recognized as marking the burial place of Ethiopian Kings and Queens, whose royal city of Meroë could not be far to seek.

Excavations have been made during four winter seasons on this site by Prof. J. Garstang, of the University of Liverpool, and are still in progress. This work is being done on an extensive scale, and all the buildings now visible to the visitor have been discovered and uncovered by these expeditions. On the east side of the railway, the most remarkable building is the Temple of Meroë, at 15 minutes' distance. This is an historic feature of Meroë, and is mentioned by Herodotus, who described it as situated in a "green meadow outside the city," a descrip-

tion which still holds good. It seems to have been built by Aspelut, about B.C. 600. The building rises in perambulatory terraces, of which the lowest is a substantial platform surrounded by a cloister. In the centre of all, and so at the highest part of the structure, is the sanctuary, with remains of an obelisk and solar emblem. Part of its floor of blue and yellow glazed tiles is still to be seen. The proportions of the architecture and the scenes of triumph sculptured on the outer walls are also noteworthy. Close to the railway on this side, there may be seen the numerous tomb-mounds of the necropolis; and among these, at the south end, are two small temples or shrines, one dedicated to the Lion-god, the other possibly to the Cow.

On the West side of the railway are the ruins of the artisans' dwellings and workshops, pot-kilns, etc. Proceeding,



HIGH ALTAR AND PLACE FOR SACRIFICING ANIMALS,
TEMPLE OF AMON, MEROË.

the pylon of the great temple of Amon is reached (at 5 minutes' distance). This splendid building is now completely uncovered, and the visitor may walk through its many-columned halls. It dates from about B.C. 300. Its axis is 450 ft. in length; and there may be seen a granite obelisk (repaired) inscribed in Meroitic writing, a sculptured stone throne-dais, a place for the sacrifice of animals, the high Altar, decorated with reliefs, and other instructive features of the building. This was the place of the oracle of Amon, whose sacred tomb-chamber may be seen behind the altar.

Climbing the ruins at the western end of the temple, the path leads over the great stone wall of the ancient city, and in front there may be seen the foundations of two royal palaces. In the middle of the nearer one are the remains of the royal treasure chamber, near which two vases filled with golden



FOUNDATIONS OF PALACE OF ROMAN PERIOD, AT MERQÉ.

nuggets and dust, as well as royal jewels of the time of Aspelut, were found during the course of excavation.

Just to the north is a columned chamber, the walls of which are decorated with frescoes showing royal personages in gorgeous robes, and prisoners. This building is now protected by a roof and locked door. The native guardian of Antiquities will give admission on request.

In front of the doorway, hidden in a pocket of clean sand, Professor Garstang discovered, in December, 1910, an imperial Roman Bronze Head, of wonderful workmanship and in perfect condition. This is a unique example of Roman art in the age of Augustus; and it probably represents that Emperor, though it is not exactly like any of his known portraits. The discovery in 1912 of a small Roman Temple in the vicinity, suggests that the image of the Emperor was actually adored by a small community of Roman settlers. The explorer himself believes it probable that the Roman expedition under Petronius actually occupied the city for a short period.

The most remarkable discovery in the most recent excavations has been that of the Royal Baths (or "Gymnasium") of Queen Candace's times. These may be visited by the tourist, but being under lock and key, the presence of the local guardian will be necessary. There may be seen in their original positions, the statues, frescoes, glazed tiles, medallions and other sculptures which adorned the facade of a large swimming bath. The water inlets and aqueducts can also be traced. Near at hand, a small semi-circular chamber with three ornamented seats represents the tepidarium. This building is the nearest to the river.

The visitor will be interested and impressed by following the whole length of the wall of the Royal City, which has now been laid bare, and noticing the traces of extensive buildings which Professor Garstang and his staff are bringing to light. Work on an even more extensive scale is now in progress, and the visitor can walk along some of the original streets of the city and enter various buildings, among them the Palace of Neteg Amon, by the doors, so gaining a better impression of the former appearance of the city.

Behen (near Halfa).

On the left bank of the river, a little above Halfa, are the remains of the ancient river port of Behen. It was a place of great importance, being at the end of the second cataract, and the point at which merchandise could be again transported by river.

Behen was occupied in very early days, the town being founded in the time of the 12th dynasty and the remains prove that it had a continuous history for more than two thousand years.

The chief temple, which was cleared out on behalf of the Sudan Government by Mr. P. Scott Moncrieff, is a very fine example of 18th Dynasty work. The coloured reliefs—especially those of Thothmes the Second before the Horus of Behen, in the innermost shrine—are particularly well preserved.

The inner temple was begun by Thothmes II. and continued by Thothmes III., whose inscription is to be found on one of the columns left at the entrance, but later rulers apparently of the Ramessid time, changed the disposition of the columns in the fore-court, and spoilt the symmetry of the original plan.

The whole site has been carefully cleared and planned by Dr. R. MacIver of the University of Pennsylvania.

A massive buttressed wall runs close by the North side of



FORE COURT OF TEMPLE AT BEHEN.



HALFA.

the chief temple, and extends some distance to the West. Both temples have houses round two sides. They have three separate and distinct floor levels, one above, one at and one below the floor or the present temple, and date from the 12th to the 18th dynasties.

Abu Simbel.

During the morning after departure from Halfa the Government steamer calls at the famous Rock Temple.

Abu Simbel, on the west bank of the river, is 46 miles from the Second Cataract and 762 from Cairo. Here are situated the most interesting monuments in Nubia. The chief object of attraction at Abu Simbel is the great temple built by Rameses II. to commemorate his victory over the Cheta in north-east Syria. For grandeur and magnificence it is second to none in all Egypt. This temple is entirely excavated in the granite stone rock to a depth of 185 feet, and the surface of the rock which originally sloped down to the river was cut



ABU SIMBEL.

away for a space of about 90 feet square to form the front of the temple, which is ornamented by four colossal statues of Rameses II., 66 feet high, seated on thrones, hewn out of the living rock. A little to the south of the Great Temple is a small building of the same date which was used in connection with the services. It was re-opened four years ago by Mr. McCullum, Miss Edwards, and party. On the walls are some interesting scenes and hieroglyphics.



Halfa to Shellal.

The river scenery is most diversified and interesting.

EN ROUTE FOR SHELLAL.

The banks, for the most part cultivated, are fringed with trees, with here and there a native town shewing through the dense foliage. Korosko is passed, from which—in the days before the railway—the caravans started southward across the Nubian Desert to Abu Hamed. At intervals the winding river opens up a panorama of mountains sweeping in from the horizon, soft and beautiful in colour; then comes a rugged mass of rock thrown up sheer from the river, and backed by hills, tier upon tier, barren and forbidding. Again the fertile tract, the natives hauling water from the river for their fields by means of *shadufs*, others threading their way on foot and on donkeys along the banks. Native *gyassas* with their broad sails straining in the wind come gliding past, and at the back of all huge humped masses of yellow sand lie golden in the light of the setting sun.



KOROSKO, ON THE WAY TO SHELLAL.

Shellal (for Assuan).

The steamer arrives at Shellal for Assuan in the early morning. Passengers proceed from Assuan to Luxor and Cairo by rail or Nile steamer.

The foundation stone of the Great Dam at Assuan was laid February 12th, 1899. It was opened December 10th, 1902, by the Duke of Connaught. Its length is approximately one and a quarter miles, and it has 180 steel sluice gates. These are open

during high Nile and then gradually closed, thus holding up an immense volume of water which is let out as required, instead of running uselessly away to the sea, as was formerly the case. It has been estimated that the yield of crops over the vast tract of intervening country will be increased ninefold, and this fact must be accepted as compensation for the encroachment of the waters on the picturesque ruins of Philae now partially submerged. Further great works are being



carried out which will largely increase the storage of water.

Assuan occupies the site of the ancient Syene, and the district bearing this name still lies in the immediate vicinity. Here is found the Porphyry which was used in so many instances in the temples and the tombs of antiquity. Traces of huge obelisks, partially quarried from the native rock, are also met with near here. The total distance from Cairo to Assuan is 583 miles, and from the mouth of the river in the Mediterranean 730 miles. The native Bazaar possesses some interest, this being until recently an important centre, to which the products of Abyssinia and Upper Ethiopia were brought by caravans for transmission to various parts of Lower Egypt; it was also the principal market of merchandise from the Sudan. Since the British occupation, many important improvements have taken place; barracks have been built and many antiquarian researches of great interest have been made.

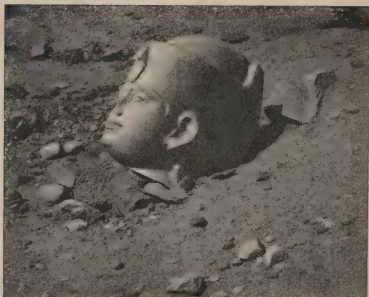
Side Excursions in the Northern Sudan.

Jebel Barkal (Dongola Province).

Jebel Barkal rises about a mile and a half from the village of **Kareima** (Abu Hamed Kareima line), and at the foot of the mountain are the remains of several temples. This site, which was named Napata, was the religious capital of ancient Ethiopia, and was the centre from which a colony of Theban priests spread the worship of Ammon. The temples were built, unfortunately, of very soft sandstone which has suffered much from the wind-blown sand, and the whole site was most unscientifically excavated about 40 years ago ; much has therefore perished irretrievably. The largest temple now in existence belongs to the Roman period, as also do the pyramids on a ridge south of the mountain, but the ramps in front of the temple and



JEBEL BARKAL.



AT JEBEL BARKAL.

a fine colossus between the great temple and the rock-cut temple of Tirhaka date back to the new empire. The famous Ethiopian inscriptions now in Cairo were found in front of the inner pylon of the

great temple. At Merowi, on the right bank, are the remains of the old Government buildings which were built on the top of a mediaeval Christian fortress, which in turn had been constructed out of more ancient materials; among these an altar inscribed with the cartouche Piankhi is to be seen. Opposite to this, behind the present capital of the province, is a very extensive site, now called Sanum Abu Dom, which in the Ethiopian and Roman periods seems to have been the secular capital of the Kingdom.



PYRAMIDS AT JEBEL BARKAL.

Nagaa and Mussawarat.

Far the most perfect ruins in the Sudan are situated in the desert at some distance from the river, and date from the old Ethiopian kingdom which is generally associated with the name of Queen Candace.

The larger of the two sites is at Nagaa. Here besides the ruined heaps of several houses and temples, there are three principal temple groups in a good state of preservation. One group lies close to the hills, on the tops of which are the traces of the quarry where the stones for the buildings were cut. A second more complex temple with many reliefs, an avenue of rams, and a ramp, stands on the edge of one of the lower slopes. Out in the plain beyond a well which was made in 1905, are two other temples: one in the Roman style of the second or third century A.D., the other in the Egyptian style, but probably of the same date. To the east of the site are the traces of a great reservoir, and there is a cemetery just north of it. To the south of the site is a wide stretch of soil which is regularly cultivated during the rainy season, and explains the presence of the ancient town.



TEMPLE AT NAGAA.



RUINS OF MUSSAWARAT.

The ruins of Mussawarat are even more interesting because more unique than those at Nagaa. They are most picturesquely situated in a basin-like valley, and very graceful both in style and colours. They consist of a great complex of buildings which have been variously identified as an ancient Academy, a Château de Chasse, a Sanatorium, and a Country Palace. The present writer regards the last identification as almost certain; the low walls of enclosure which surround the principal buildings appear to have been built as pens for herds or flocks. The central building on a raised platform, with little towers at the corners and a colonnade in front, would then be the king's principal divan, and the buildings connected with it by long covered passages and ramps would be either temples or Harim Quarters. The building shows traces of reconstruction, but belongs practically to a single period, the second or the third century, A.D. One short inscription in Meroitic characters is on the back wall of the central building, and on another of the buildings some names in Greek characters show that Christians subsequently settled here, probably as hermits. To Cailliaud, the French explorer, who accompanied the army sent to conquer the Sudan by Mohammed Ali, is due the honour of first having made these sites known to European scholars.

Nagaa and Mussawarat can be visited from Shendi, Goz, or Wad Ban Naga stations. These excursions can be undertaken only by special arrangement.



A WATER-WHEEL AT WAD MEDANI.

South of Khartoum by Rail.

The Railway has been extended 430 miles to the south of Khartoum, passing through Wad Medani to Sennar, where it turns from the Blue Nile and cuts sharply across country to the westward to Kosti on the White Nile. Proceeding further westward it now reaches El Obeid, thus opening up a most important country for commercial development, and from which very large supplies of grain, gum, food-stuffs, and cattle are being exported.

Wad Medani is an interesting and large native town, whose conical straw roofed huts, or *tukls*, are laid out in streets on a regular plan, and enjoys a considerable trade in local agricultural produce. The Palace of the Governor of the Province is situated here on the banks of the Blue Nile and facing the beautiful Palace Gardens. In these gardens rich tropical plants are found side by side with those that flourish in our home countries. The population consists of Fung and Hamag blacks, with the addition of numbers of other Arab tribes.

From Sennar, a ride of a few miles through the forest—the wild home of numberless monkeys—brings one to the once populous town of Old Sennar, now lying in ruins. The Mahdi twice laid siege to the town without success, but a final



SENNAR.



THE GARDENS AT WAD MEDANI.

attempt by the forces of the Khalifa resulted in its destruction and the massacre of almost the whole of its population.

Kosti is rapidly taking an important position, and lying on the bank of the White Nile is served both by railway and steamer. The river is crossed a few miles before reaching the town by a bridge, 500 yards long, and of eight fixed spans and one swing span, a fine piece of work carried out by the Cleveland Bridge and Engineering Co. of Darlington, England. One is here on the fringe of the wild country, and in the busy grain market are found natives of many southern tribes, Habbantias, Danaglas, Dinkas, and occasionally Shilluks. In the early morning they



THE "SUK," KOSTI.

ride in, mounted on bullocks and armed with native spears. Fierce in appearance and fierce by nature, they are now docile and peaceful in the knowledge that they are safeguarded in their business avocations.

Near the town is Abba Island, famous as the home of the Mahdi, and where he laid and carried out the first plans towards the conquest of the country and its attendant horrors.

El Obeid.

In connection with the extension to El Obeid, 460 miles of the existing line North of Khartoum were relaid with a heavier section (75 lb.) rails, the old (50 lb.) rails being used on the extension where the traffic is lighter. At the same time the railway terminus at Khartoum North was moved and a new station was opened in Khartoum itself. Altogether some 900 miles of railway have been laid or relaid under this scheme.

The work started at the end of 1907 and has thus been in progress during four years. No extension of the railway was possible until April, 1909, when the false work of the Blue Nile Bridge being sufficiently advanced to enable trains to cross to the south bank, railhead was at once started and reached Wad Medani, 109 miles, before the end of the year.

Meanwhile, the White Nile Bridge was begun, the work being completed in December, 1910, a few days before railhead arrived, so that by the end of 1910 the railway had crossed the White Nile and reached Kosti, a distance of 238 miles from Khartoum.



EL OBEID, KORDOFAN.



During 1911, the line was steadily continued, railhead arriving at El Obeid, 192 miles from Kosti, just before the end of the year.

The work of relaying on the lines north of Khartoum was carried out principally during the summer months when the rains rendered work at railhead impossible. During 1911 above 400 miles were laid or relaid by the same working parties, an average of $1\frac{1}{3}$ miles for each working day throughout the year.

During the four years these works were in progress, there was a very marked development of traffic over the railway generally, as a result of which the receipts were increased 50%.

Some idea will be obtained of the effect of this new railway upon the country which it opens up when it is realised that the many thousands of tons of gum exported from the Kordofan province now reach Khartoum in a day and a half compared with a fortnight's transport by camel which was formerly necessary.

This long and arduous journey which, in the old days, separated El Obeid from any communication with civilised districts having thus disappeared, considerable developments of the many resources of Kordofan, particularly of the gum and cattle trade, are confidently anticipated.



THE WHITE NILE.

SUDAN GOVERNMENT STEAMERS

South of Khartoum by River.

Owing to the limited amount of accommodation on some of the steamers, intending passengers should book well in advance.

No passage can be considered secured until the full amount of the passage money has been paid.

Regular Postal Services.

Passengers travelling by the regular postal services, south of Khartoum, will always find every attention and comfort. The advertised time tables will be adhered to as closely as possible, but sight must not be lost of the fact that the exigencies of the Government Service must claim first attention.

Catering.

On most of the regular Postal Services catering services are provided, at a fixed daily charge, in addition to the fare. Intending passengers should be reminded that the question of catering in out-of-the-way places is attended with considerable difficulty, and that the cooking, although good, may not always satisfy fastidious tastes.

Shooting Parties.

For the convenience of persons desirous of chartering special steamers for shooting parties on the White Nile and tributaries, the special arrangements made by the Department include the provision of personnel, camp equipment, transport and riding animals, and catering. Details are given in the Memorandum on Special Charters, page 49.

It should be noted that these arrangements apply only in the case of persons chartering steamers from the Department. Those undertaking a land expedition must make their own arrangements for all services required, and may apply to any of the private firms in Khartoum, who are generally prepared to undertake these services.

Towage by Regular Steamers.

Dahabeahs may be towed by steamers employed on regular services at moderate rates, by special arrangement, provided such towage does not inconvenience the regular running of the steamer employed. See page 50.

Sudan Government Steamers navigate the main course of the White Nile to Rejaf.

Particulars as to the above services and those to Meshra-el-Rek (Bahr-el-Ghazal), to Gambela via Sobat River, and on the Dongola Reach, can be obtained on application.

Cruises on the White Nile.

Khartoum-Kosti Post Boat.



To those who desire to get a glimpse of the country south of the capital the trip between Khartoum and Kosti offers a favourable opportunity.

The steamer leaves Khartoum, calling at Omdurman, for Dueim, Kawa, Fachi Shoya, and Kosti, returning thence to Khartoum.

All cabins are situated on the upper deck, and the upper and promenade decks are entirely reserved for first-class passengers.

The journey one way may be performed by train. Full particulars on application.

Cruises of about twenty-five days on the White Nile.

Khartoum- Rejaf Post Boat.

The steamers leaving Khartoum for Rejaf are fitted with electric light, hot and cold baths, mosquito-proof shelters, etc. In winter however the mosquito is very rare.



BUFFALO.

During the trip the traveller passes through the varying regions of desert "Sudd" and forest, seeing the Dinka and Shilluk tribes in their most primitive state and calling at the stations of the American and British Missionary Societies. The

infinite variety of bird life, antelope of many kinds, hippopotami, elephants and possibly a lion or two, afford continued interest to the observer.



NATIVE NILE BOAT.

Description of Journey.

The steamer leaves Khartoum and very shortly afterwards the Mogren Point is turned and the White Nile entered. The remains of the old earthworks between the two rivers can be seen, as also the level ground where the Mahdi's troops took their stand before the taking of Khartoum in 1885. Gordon's tree makes a prominent landmark.

Immediately afterwards the channel widens considerably to some two or three miles, and the river has a lakelike appearance. The banks are very low and flat, and large flocks of sheep and cattle may be seen grazing on them. Geese, pelican, and thousands of waterfowl are met with, whilst on nearly every mudbank reposes a crocodile. Twenty-one miles from Khartoum, on the right bank, the volcanic hill of Jebel Auli appears, and a few miles farther on the flat topped Jebel Mandara on the left bank. Still steaming on, the large village of Geteina, inhabited mostly by Danagla Arabs, is reached, and from here the banks of the river become high and sandy. A few mimosa and acacia trees are passed, as well as occasional sand hills. During the time of low Nile, mud islands appear, on which, the soil being very rich, crops are quickly grown. Farther on, dense growth of mimosas and acacias are seen, and Jebel Arashkol, at about



NATIVE NILE BOAT.

95 miles, a high hill with well-defined peaks, can be seen in the distance.

El-Dueim, 110 miles from Khartoum, is reached. Here on the river bank strips of cultivation appear, and the west bank is covered with

dense acacia forest. Large quantities of gum are brought here from Kordofan for transshipment to Khartoum. Kawa, at 131 miles, is next reached. The houses, or *tukls*, will be seen to be well built, with conical straw roofs. The inhabitants are mostly of the Danagla and Habbania tribes, who appear to be fairly prosperous. They are mostly engaged in agriculture—cultivating barley, wheat, onions, bamia, etc., etc.

Soon afterwards the north end of Abba Island appears in sight. This island, whence the Mahdi originated his crusade, is about twenty-eight miles in length, and is thickly wooded. An occasional Dinka may now be seen near the river.

Fachi Shoya (163 miles) is passed, and here can be seen the ruins of the Mahdi's house, where Mohammed Ahmed followed his trade of boat building. Here also was the starting-point of the expedition which ended in the defeat and death of the Khalifa Abdulla by the Sirdar in 1899.

Still steaming, Kosti is reached (175 miles), on the east bank opposite the south end of Abba Island, where there is a Government station. A change will now be noticed in the country. North of Abba Island the riverain inhabitants are mostly cultivators and pastoral Arabs; whilst south of it the country of the negroes begins.

Absence of cultivation is strongly marked—forests approach near the river, and game becomes very plentiful. Hippopotami, crocodiles, and antelope are very numerous, and water-birds of every description are seen. Steaming on, occasional floating blocks of sudd are met with in the river channel, and papyrus reed is first noticed in small patches.

At 222 miles, Jebelein ("two mountains"), an imposing ridge of rocky hills, is situated on the right bank, and the forests become extremely dense. Five strangely-shaped granite



A NATIVE MARKET.



A DRY KHOR (RIVER COURSE).

peaks make Jebelein easily distinguishable.* After this the river winds through forests, reedy islands, and occasionally floating weed. At 281 miles Renk is reached; here a Dervish *deim*, or camp, was bombarded in 1898, and a steamer captured by the Egyptian gunboats. The forest on the river edge is thick and dense. Still steaming, Jebel Ahmed Agha (at 340 miles) appears, a sombre-looking hill about 350 feet in height. Here is a noted game district and an absence of cultivation on the banks. Still steaming on, the scenery retains its character, forests and grassy swamps appearing on both sides of the river, whilst an occasional fishing village is passed, the villages of the Dinkas being several miles inland on the east bank.

Kaka is passed at 390 miles. This is a large group of Shilluk villages, and the northern limit of the Shilluk country. The inhabitants live mostly by fishing and hunting. They use for the purpose roughly-made long and narrow canoes lashed with raw hide, or small rafts constructed from the ambach tree, which grows in profusion on the river banks. Many accidents occur to these craft owing to their being upset by hippopotami which are here met with in large numbers.

Some of the canoes are of very ingenious construction. The ambach limbs taper from the roots, and the natives lash a number of them together so as to form a handy-shaped little canoe, which can be easily carried on a man's head when hunting, if necessary. These canoes have, however to be dried in the sun periodically, when they become soaked with water.

Landing on either side of the river is well nigh impossible, owing to the belt of reeds. Occasionally large Khors (river courses) are met with, their banks being fringed with thick undergrowth, and many Dinka and Shilluk villages are seen on the right and left banks respectively.

Kodok is reached, 469 miles from Khartoum, situated near the headquarters of the Shilluks. In the rainy season it is surrounded on three sides by swamps, and is separated from

*The Dinka country commences here on the east bank.



the river at low water by an island and a reed-covered back water. The fort, constructed by Major Marchand, was built on the site of the old Egyptian fort, and the present Governor's quarters are near the same spot. Marchand's garden is still kept up, and in good repair.

About half a mile to the south is a large village where a few enterprising merchants now offer European goods for sale, and a few miles farther is the residence of the *mek*, or king, of the Shilluks. The Shilluks are a very tall, slightly built, active race, chiefly living by hunting and fishing, and they are much adverse to manual labour.* The rainy season here commences in May, and the river rises and falls about four feet.

At 520 miles Malakal, the headquarters of the Southern Section of the Sudan Irrigation Service, is passed.

Taufikia, 530 miles from Khartoum, is the headquarters of the troops on the Upper Nile, and is a healthier and more picturesque spot than Fashoda. The officers' quarters and barracks, etc., are on a high bank, shaded by numerous trees. Sir Samuel Baker established a station here when he was clearing the Bahr-el-Zeraf of sudd.

Four miles farther on, the Sobat River joins the Nile—a fine stream with high banks, originating in the highlands of Abyssinia.

About five miles up the Sobat at Doleib, or Tartug Hill, an American Mission station has been established, where efforts are being made to civilise the natives, and 188 miles up this river there is a Government post at Nasser. The inhabitants are Shilluks, Anuaks, and Nuers.



*They grow large quantities of dura, in contradistinction to other neighbouring tribes.

Passing the mouth of the Sobat, the river widens considerably, but the banks are very low and covered with mimosa scrub on the east; many Shilluk villages are seen on the left bank. The river then narrows again. Grass plains, dotted with trees, extend on either bank as far as the eye can reach, and the banks continue to be very low. Large ant hills are seen scattered here and there. At 545 miles from Khartoum, Khor Attar is reached, where there is a wood-cutting station, and trees of a large size become more numerous.

At 565 miles (on the right bank) the mouth of the Bahr-el-Zeraf is reached. From here the course lies through low country, and trees become very scarce. Elephants, hippopotami, hartebeest, buffalo, reed buck, and wild geese are met with, while crocodiles cover the sand-banks and shelving shores. The rare Mrs. Gray's water-buck is here to be met with for the first time.

At mile 615 Lake No is entered, and an immediate sharp turn to the south brings the steamer into the Bahr-el-Jebel, the main stream of the Upper White Nile. This river, which has now been completely cleared of sudd, looks like a winding canal cut through banks of papyrus for several hundred miles.

Elephant and giraffe are seen, but always at a distance from the river bank; and the reeds, principally papyrus, tiger grass, and Um Sûf, stretch far on either side, making a vast uninhabitable waste of marsh.

SUDD (a block) is the name given to masses of water-plants and papyrus which grow or float into the river from the neighbouring lakes. If these masses become stationary for any length of time, the limbs reach the bottom and take growth, or



JURS MAKING A GRAIN-BIN, BAHR-EL-GHAZAL.



A DINKA HUT.

else the floating plants jam together in a narrow channel ; in either case they make a solid mass of vegetation which often closes the channel of the river entirely. Huge blocks of sufficient thickness to stand upon, and even camp on, have been encountered, and their removal—either entirely or in sections—has been only effected with enormous difficulty and labour. In fact, in 1860, an Italian official, Gessi, found his return passage down the Bahr-el-Ghazal River barred in front of him, owing to the channel suddenly being blocked with huge masses of sudd, and he suffered great hardships before he eventually found his way out.

Happily such an unfortunate contretemps is not at all likely to occur at the present time, as, since the channel was opened in 1900, the current runs with sufficient strength to keep it clear.

Steaming on through the sudd region, lakes and lagoons border the river, and papyrus reeds seem to be the only vegetation. The bank again becomes solid at Hellet-el-Nuer (749 miles), and a few scattered Nuer villages are seen, but five miles farther on the sudd is again encountered.

At 876 miles the southern end of the Bahr-el-Zeraf branches off, and the Shambé lagoon is reached at 865 miles. The village of the Kiech Dinkas and the station lie a short distance from the river up a broad backwater, and forest land is seen. From here a route lies across the Bahr-el-Ghazal province through Rumbek to Wau, the headquarters of the Bahr-el-Ghazal province. Such immense numbers of hippopotami are now met with in the lagoons and river as to be a nuisance, and constitute a danger to the natives when fishing in their small dugouts or ambach canoes.

The marsh lands appear much lower, and firm ground and trees are visible in the distance. The channel continues its extraordinary twisting, and at 910 miles the old site of Kenissa

church is reached. Trees become more plentiful, and a wooding station is situated on the western bank. From here southwards a sharp lookout should be kept for elephants. The papyrus is replaced by tiger grass and Um Sâf, and grass fires continue to be seen frequently. Numbers of natives can be seen fishing from their dugout canoes. It is amusing to see the haste in which they haul their small craft to the reeds on the approach of the steamer, to escape being swamped by its wash. Steaming always, the Dinka village of Bor is reached, where an Egyptian post was established by Gordon in 1874. Near here are the remains of a Dervish stronghold, long held by Emir Arabi Dafaalla.



SUDANESE FAMILY.

The scenery then changes. Many villages and much cattle are seen, and the vegetation becomes more typically tropical. The villages are inhabited by the Bari negroes, a tall and strongly-built race. Their huts are well built, neat and picturesque. Rhinoceros are to be met with. After leaving Bor, the river takes a sharp turn; the banks change character, and some cultivated ground is passed.

A portion of Sudan territory which until recently was leased by the Congo Free State Administration (known as the "Lado Enclave") reaches to the river a few miles north of Kiro on the west bank (1043 miles), where a station

has been formed. The officers' quarters and other buildings are well built, with conical thatched roofs. The station forms a very pretty scene, being situated on a high bank, well shaded by trees, and surrounded by gardens and cultivated lands. Opposite, on an island, banana and pawpaw trees abound in pro-



WASHING DAY.

fusion. The station is garrisoned by troops.

Mongalla (1056 miles), on the east bank, the southernmost station of the Sudan Government, is reached; here a garrison of Sudanese troops has been established since 1901.



After this comes Lado, at 1072 miles, on the west bank; this was the principal Belgian station on the Nile, and was strongly garrisoned. The buildings and quarters are constructed in the same manner as those at Kiro. The station was formed by Gordon in 1874, and was for some time the headquarters of Emin Pasha.

Leaving here, the course is resumed to Gondokoro, 1081 miles from Khartoum. It is the residence of a sub-commissioner of the Uganda Administration, and is garrisoned by Uganda Rifles under a British officer. Gondokoro has a splendid situation. The river bank is high, and fine large trees abound. Ranges of mountains are seen to the south, the river is wide, and many islands appear; the whole makes a very pleasant scene, which is in striking contrast to the other wild districts previously passed through.

The site of Sir Samuel Baker's old station, on a high bank, still shows traces of the occupation in the shape of remains of buildings and fortifications and fruit trees; whilst some miles east of the station rise some low hills.

The steamer then proceeds through scenery of continued interest to Rejaf, 1,096 miles, the last stoppage on the journey.

The return journey from Rejaf to Khartoum occupies about ten or eleven days.



**Memorandum on Special Charters,
Shooting Parties, etc., South
of Khartoum.**

SPECIAL NOTICE.—Persons visiting the Sudan for Shooting Trips will be required to furnish the following particulars when making application for a tour :—

- (i) Applicant's nationality.
- (ii) Number and nationality of persons accompanying him.
- (iii) Proposed date of arrival at Khartoum.
- (iv) The precise locality in which it is desired to shoot.
- (v) Whether the trip is being undertaken as a private venture or on behalf of some public body (e.g., museum), and, if so,
- (vi) Whether applicant has written authority from such public body, and
- (vii) Whether the trip is for shooting any particular species.
- (viii) Whether applicant has previously shot in the Sudan, and, if so, when?

Charterers of steamers will be required to make the following payments in respect of the total charge for the hire of the steamer :—

- 20% on signing the agreement.
60% before steamer leaves Khartoum.
20% on return to Khartoum, including extras, if
any, under Clauses of the Charter Party.

Postal matter, etc., intended for shooting parties should be addressed c/o The Postmaster, Khartoum, to whom forwarding instructions may be given.

Provisions, etc., should be consigned to recognized Shipping Agents, e.g. :—

Messrs. Gellatly, Hankey & Co., Port Sudan and
Khartoum, and Dock House, Billiter Street,
London, E.C., and 62, Pall Mall, London, S.W.

Messrs. Contomichalos, Darke & Co., Port Sudan and
Khartoum; and Messrs. Temperleys, Haslehurst
and Co., 35, Billiter Buildings, London, E.C.

1.—Hire of Special Steamers.

- | | | |
|-----|-------------------------------------|-----------------------------------|
| (a) | Suitable for a party of 2-3 persons | ... £E. 18 per diem. |
| (b) | „ „ „ „ 4-8 „ | ... £E. 30 „ |
| (c) | „ „ larger parties | ... Special terms on application. |

The above rates of hire include all Navigation Charges, Engineer and Crew, Fuel (condition as per charter), Deck and Engine Stores, Cabin and Saloon Outfits, Bedding, Linen, Table Requisites, Plate, Glass, Crockery, and Kitchen Utensils, &c.

The condition of charter above referred to makes allowance for an average of twelve hours' steaming out of every twenty-four hours' hire.

2.—Hire of Sailing Dahabiehs (when available).

Suitable for Party of— Per Day.
Two persons, Dahabieh "AMIRA," at £E. 3.300 m/ms.
Three or four persons, Dahabieh
"CANDACE," at £E. 4.400 m/ms.

The above rates of hire include Native Crew, Cabin and Saloon Outfits for two or three persons.

These boats can be let with or without a Steam Tug in attendance.

3.—Hire of Steam Tug and Towage.

Hire of tug, £E. 12 per diem.

The above rate of hire includes all Navigation Charges, Engineer, Crew, Fuel (condition as per charter), Deck and Engine Stores, etc., but no Cabin or Saloon Outfits or other requisites.

Towage by Post Boat, when the exigencies of the department permit, of Dahabieh or any small boat 100 m/ms. per kilometre.

If towage is performed by a Tug or Steamer which has to be specially diverted to perform such towage, the charge for towage will be made on the actual number of kilometres the tug or steamer has to travel to pick up its tow, plus the number of kilometres of the actual tow, and, if any, the number of kilometres on the return of the tug or steamer to its appointed position after the tow has been completed.

5.—Personnel, Equipment, &c.

A. For the convenience of those chartering Government Steamers, Dahabiehs, &c., the Department undertakes to provide :—

(a) Native Servants, including Cooks, Waiters, &c.

(b) Native Shikaris, Taxidermists, and Bearers to accompany Sportsmen when in pursuit of game.

(c) Transport and Riding Donkeys, including attendants and forage, for inland excursions.

The charges for these services are as follows :—

Per day.	(a)	(b)	(c)	(d)
For 2 Persons	80 P.T.	100 P.T.	100 P.T.	230 P.T.
„ 3 „	100 P.T.	120 P.T.	150 P.T.	300 P.T.
„ 4 „	115 P.T.	140 P.T.	180 P.T.	370 P.T.

(d) All Servants, Animals, &c., supplied under "a," "b," and "c."

Number of Servants and Charges increased in proportion to size of Party.

An example of service provided for 2 Persons :—

(a) One 1st Sufragi	...	Head Waiter and Valet.
„ 2nd „	...	Assist. „ „
„ 1st Cook	...	Native.
„ 2nd „	...	„
(b) Two Shikaris	...	Native Hunters.
Four Bearers	...	Carriers and Attendants
One Taxidermist	...	Native Skinner.
(c) Two Riding Donkeys	}	Including Forage.
Four Halla Donkeys		
Two Donkey Boys		

The supply of suitable servants, hunters, &c., is limited, and cannot be guaranteed unless previous and sufficient notice be given in London at the Office of the Sudan Government Railways and Steamers.

B. CAMP OUTFIT, &C.

For 2 Persons	...	70 P.T. per day.
„ 3 „	...	100 P.T. „
„ 4 „	...	130 P.T. „

The Outfit supplied includes :—

Riding and Pack Saddles for Animals.
One Tent, Table, Two Beds, Chairs, Washstands,
Baths, Canteen, Water Carriers, &c., according to the number of persons in the party.

C. CATERING.

£E. 150 P.T. per head per day up to four persons.
Special terms for larger parties.

Intending charterers are reminded that the question of catering in out-of-the-way places is attended with considerable difficulty; and, further, that Native Cooks, although good, are not always able to satisfy fastidious tastes.

NOTE.—For Ladies' Maids and European Servants an extra inclusive charge of 75 P.T. per head per day.

IMPORTANT.—All applications must give the following information :—

1. Definite date of sailing from Khartoum.
2. Period of hire.
3. Number of persons included in the party.
4. Whether a European Engineer is preferred, subject to one being available.

“NOTES FOR SPORTSMEN VISITING THE SUDAN,” containing Game Laws, Regulations, Cabin Plans, and other useful information, can be obtained at the London Offices of the Sudan Government Railways and Steamers.

Also chart shewing approximate distribution of Game in the Sudan.

SEA FISHING AT PORT SUDAN.

The new harbour of Port Sudan, on the Red Sea Coast, offers unrivalled attractions to the sea fisherman during the winter and early spring months. The harbour is deep and of coral formation, and abounds with many varieties of game fish, among which the Bayardo, the Sirroe and the Barracouta are the most sporting; these fish run up to 40 lbs. and more in weight, and are most determined fighters.

The usual method of fishing is to obtain the services of a native fisherman, who nets a large quantity of sardines with which the harbour swarms, and which form the staple food of all surface-feeding fish. The fishing is from boats. The sardines are kept alive in a large basket suspended from the side of the native fisherman's dugout, which is moored alongside the boat. The usual bait-casting method may be employed, but as it is essential to keep the bait near the surface, no leads should be used, and for this reason it is probably better to throw the line by hand, as the lack of weight makes casting very difficult. The native fishermen are very expert at this work, and can throw out twenty yards of line with each.

Two classes of rods can be used, either a tarpon rod 9 or 10 feet in length, or a stout salmon rod of about 14 feet.

A free running reel for casting is essential, and metal is to be recommended, as most wooden reels warp and shrink in the Sudan climate. A steel trace is also essential, but this need not be more than 18 inches or so long. The best traces are of soft flexible plaited wire, the ordinary single wire being too brittle, and very rapidly corroded in the salt water.

Excellent sport may also be had trolling from a sailing or rowing boat with a sardine mounted on a crocodile or similar spinning tackle. In any case, it is essential to keep the boat, if moored, ready to cast off without delay when a fish is hooked, as a big fish will at once head straight out of the harbour, and unless followed up will quickly run out the whole line. It is advisable to have at least 200 yards of tarpon line on the reel. Hooks should be small and very tough; a highly tempered hook is too brittle owing to the hardness of the fishes' mouths, and leads to exasperating breaks.

The Railway Hotel is close to the fishing ground. All arrangements for boats, fishermen, etc., will be made by the Hotel Manager. Sportsmen are recommended to bring tackle with them, as little can be obtained locally.



Outfit.

A few general suggestions with regard to outfit will be found of use. It is advisable for passengers to be prepared against cool winds during the months December to March, and they should have in readiness the winter coats and other clothing which they wear on the journey out to Egypt, until they feel the improved climatic conditions in the Sudan itself. A warm rug will be found useful when travelling at night, and a light overcoat for evening wear. In the daytime, ordinary summer flannel suits, tan shoes and boots, including a stout pair for visiting ruins, etc., riding breeches and gaiters for camel riding, and ordinary light-weight woollen underwear, with perhaps the addition of a woollen belt. The ordinary weight of evening dress clothes will suffice. In the Sudan, visitors should wear a sun helmet of a pattern such as to well shield the temples and neck.

Ladies will appreciate a cloth costume for the journey to the Sudan, especially *via* the Red Sea, and should also carry an overcoat. In the Sudan a light coat or woollen golf coat will be found useful after sunset. Otherwise ordinary summer clothing made of light cloth and washing dresses, all of walking length, will be found sufficient. Tan boots and shoes, including a fairly heavy pair, should be taken, and summer weight woollen underwear and warm nightwear will complete the outfit. A sun helmet with wide brim all round, and a green lined sunshade, should be included. Evening dresses as worn during the summer in Europe. For camel riding, breeches, coat, and short skirt of khaki serge or some such material, boots, and gaiters or puttees.

The tourist should carry, easily accessible, such small miscellaneous articles as the following:—A small writing case with materials, pocket knife, all sewing materials, soap, and a pair of tinted spectacles with dust guards.

It is advisable as an ordinary precaution to carry a small supply of medicines, preferably in tabloid form.

Generally speaking, any requisites that may have been forgotten can be obtained at the various well appointed stores in Khartoum.

Customs Information.

PORT SUDAN.

Passengers arriving by steamer at Port Sudan will find porters supplied by the Customs, who take all baggage from the steamer deck to the examining shed, where, after the usual examination and a payment of a fee of 1 P.T. per package for portorage, it is taken into the train without any further charge. Passengers are requested not to give gratuities to porters or other persons.

Bona fide personal effects, such as clothing, etc., are admitted free of duty, but packages are subject to examination.

1. It is important that all liquors, firearms, and ammunition are declared in detail. Permits for liquor and ammunition are obtained from the Inspector, Port Sudan, and temporary permits for firearms are issued by the Superintendent of the Port Sudan Customs, who requires the following details:—

Description of firearm.

Maker's name.

Number of firearm

Bore.

Destination of owner in the Sudan.

Travellers unacquainted with the Sudan Government Ordinances dealing with liquors, arms and ammunition are recommended to wire from Suez to Inspector, Port Sudan, stating what they are bringing and requesting necessary permits to be prepared and given to them on arrival. This will save trouble and delay.

For passengers leaving Port Sudan by sea, the same arrangements apply as regards baggage.

A Royalty tax of from 15 to 20% is payable on unmanufactured ivory, ostrich feathers, and certain other articles.

All firearms and ammunition must be declared and licences produced for registration, with the same details as to description of weapons, &c., as on entering the country. Passengers intending to return to the Sudan can have lead seals attached to firearms at a nominal charge, which will entitle them to re-importation without paying duty.

2. Goods which have paid duty in Egypt enter the Sudan free upon production of proof of payment of such duty, but are subject to all usual formalities and regulations.

3. Duty on all unused articles is 8%, with the exception of tobacco, cigars and cigarettes, the duty on which is 30 P.T. per kilo. One opened box of each, not exceeding 1 kilo in weight, is allowed free.

Export duty of 1% is payable on all Sudan produce.

Hashish is prohibited, and its introduction into the country is a criminal offence.

Trophies, skins of wild animals, &c., are subject to an additional tax of 10%, unless accompanied by a certificate that the animals were shot under a Sudan licence, in which case no tax will be levied.

HALFA.

IMPORT.—Passengers arriving at Halfa from the North, having paid duty in Egypt on all articles subject thereto, are allowed to import their effects into the Sudan duty free, but their baggage is nevertheless liable to be examined for the following articles :—

Arms and Ammunitions—Alcoholic Liquors.

Travellers wishing to import these articles into the Sudan via Halfa should be careful to obtain permits from the Sudan Agent, War Office, Cairo, otherwise it is possible that such articles may be delayed at Halfa.

Hashish.

The importation of this drug is a criminal offence.

Passengers' baggage is examined by Customs' Officials on board before disembarkation.

EXPORT.—Passengers leaving the Sudan via Halfa are requested to declare any ostrich feathers or unmanufactured ivory in their possession, on which articles a Royalty tax of 15 to 20% is payable. If this has already been paid in Khartoum or elsewhere, the relative receipt should be produced. All arms and ammunition exported must also be declared in detail, and the relative licence produced for registration by the Customs Official.



= about 1s.
= or 25 cents.
= „ 1.25 frs.



= about 2s. 1d.
= „ 50 cents.
= „ 2.50 frs.



= about 4s. 2d.
= „ 100 cents.
= „ 5 frs



= about 5d.
= or 10 cents.
= or 50 c.



NICKEL
= about 1½d.

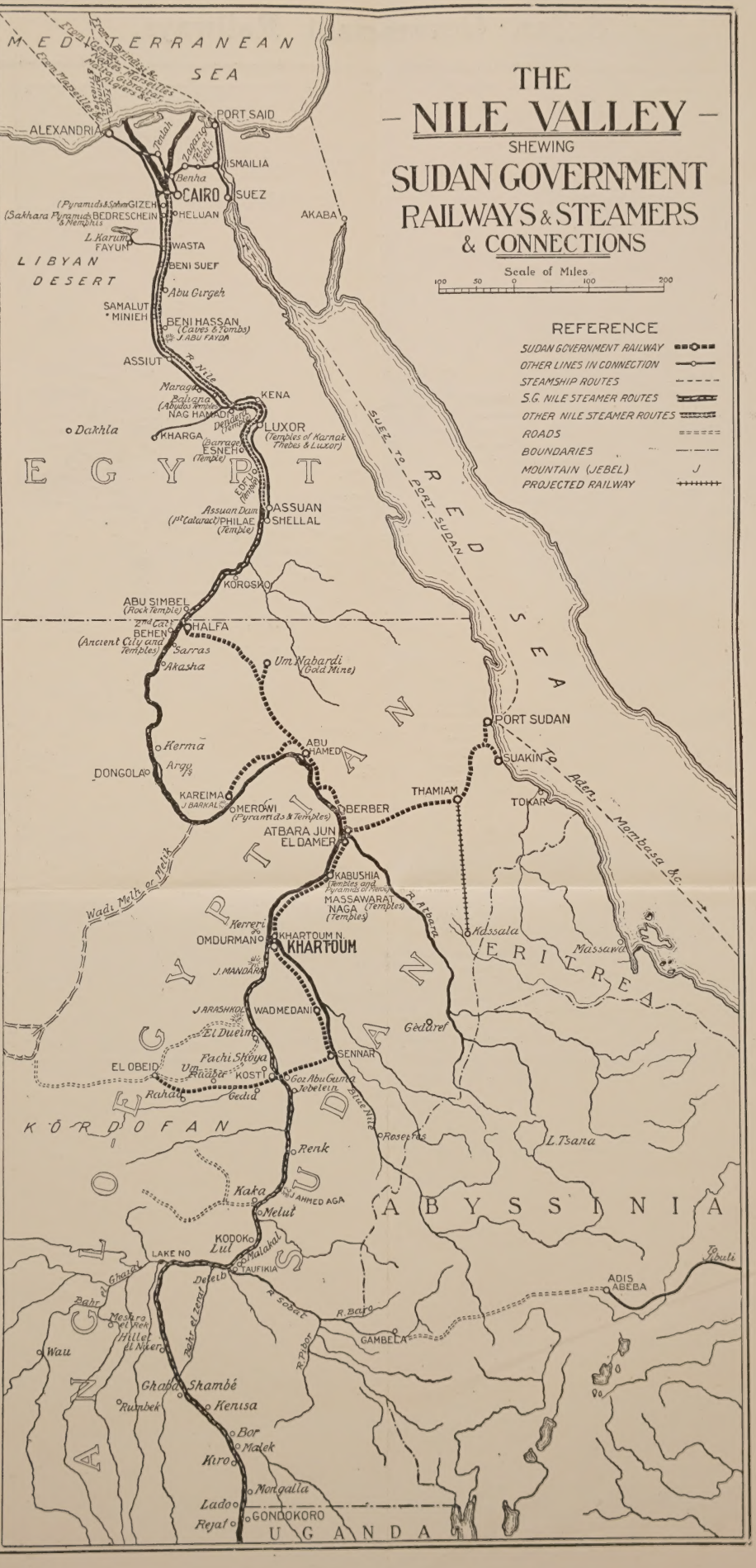


NICKEL
= about 2½d.
= or 5 cents.
= or 25 c.

£E1 (One pound Egyptian) 100 piastre = 1000 milliemmes.

= about £1 0s. 6¼d. English.

£1 (One pound sterling) 97½ piastres = 975 milliemmes.



THE NILE VALLEY -

SUDAN GOVERNMENT RAILWAYS & STEAMERS & CONNECTIONS

Scale of Miles
100 50 0 100 200

- REFERENCE
- SUDAN GOVERNMENT RAILWAY
 - OTHER LINES IN CONNECTION
 - STEAMSHIP ROUTES
 - S.G. NILE STEAMER ROUTES
 - OTHER NILE STEAMER ROUTES
 - ROADS
 - BOUNDARIES
 - MOUNTAIN (JEBEL)
 - PROJECTED RAILWAY

Sudan Government Railways.



“BAKSHISH” :—

Important Notice.

TRAVELLERS, while in the Sudan, are particularly requested to refrain from gaining an easy reputation for generosity by giving money to children, beggars, or other persons who have not earned it.

At present the population of the Sudan has not been demoralized by indiscriminate almsgiving, but it will not require much of this to make the demand “bakshish” as importunate and annoying to travellers as in Egypt itself, and to cause a considerable number of natives to forsake the paths of honest industry for the unwholesome existence of preying upon others.

His Excellency the Governor-General trusts that all travellers will consider this as a personal request from himself, and at the same time would inform them that if they desire to give any money for the benefit of the inhabitants, that contributions for hospitals or relief of deserving cases amongst the poorer classes; will be carefully administered by the Governors, and that he himself will gratefully receive contributions for what is the Sudan's greatest need, viz.: EDUCATION.

By Order OF THE GOVERNOR-GENERAL.

KHARTOUM.

SUDAN



R. Roussel